Can you solve the problems this firm uses to test graduates?

Edmund Tadros Media and marketing reporter



Apr 19, 2022 - 12.58pm

Consulting firm **Partners in Performance** asks candidates to solve multiple case studies during a recruitment process designed to test how well applicants can solve business problems and do maths without a calculator while under pressure.

The case study interview method assesses how well candidates can break down a theoretical business problem into parts before suggesting a range of practical solutions, said Michael Huggins, a director (a senior partner equivalent rank) and head of the Australia and New Zealand region at PiP.

The examples are often based on previous PiP work such as helping a retail client reverse a decline in profit, helping a manufacturer increase production of cheese singles and helping a dairy producer sell more milk to cafés. (See below for excerpts of two example case studies and the suggested solutions)

The case study test is used by many consulting firms to test the problem-solving skills of potential employees and partners, with a cottage industry of training courses available across the internet for candidates keen to practise the technique.



Partners In Performance director Michael Huggins says candidates are asked to solve problems such as how to increase the profitability of a business or reduce its cost base.

PiP says high academic scores are still the first hurdle that candidates must clear. This year the firm invited 80 candidates to an initial group interview and by the end of the process had hired 14 graduates across its five offices in Australia and New Zealand.

'Value driver tree'

The firm asks candidates to complete case study questions using the "value driver tree" model, a well-established visual framework that breaks down the components that drive value within an organisation.

"A value driver tree is visual representation of the key levers in a business. By splitting out and showing the levers, we are able to focus on each of the levers and what we can do on them," Mr Huggins said.

"The value driver tree is like a tree, with the trunk the ultimate measure we are interested in, such as profit. Then the branches are the key levers in that business. It may be volume or price or variable costs or fixed costs, and so on."

Mr Huggins said each branch of the tree has a mathematical relationship to other branches. Candidates are expected to use the framework "to create a structure that makes it easy to identify the elements of a business process that drive overall value".

"During the case study interviews candidates will be asked to solve business problems like how to increase the profitability of a business, or reduce the cost base of a business," he said. Candidates are encouraged to ask interviewers questions while solving the case study to both confirm the parameters of the problem and to display their thinking process. They are then expected to summarise and prioritise a set of practical solutions to the given problem.

The firm does not allow calculators but also does not award extra points for being able to perform calculations mentally. The recommended method is for candidates to lay out the value tree and related calculations on paper.

The firm hires graduates from a range of academic backgrounds and uses academic performance as a primary screening factor, with a candidate's university grade average expected to be at least 80 per cent.

PiP also considers whether a candidate has previously worked in a part- or fulltime job, completed any internships, volunteered or earned any academic or sporting awards.

New graduate group

The firm's recruitment team spends an average of 40 minutes briefing each candidate on the interview process and how to best prepare. This includes an explanation of how to use the "value driver tree" framework. PiP also recommends candidates practise using the framework before their interview. New graduates at Partners in Performance at the firm's Sydney office, from left: Jessica Stuart, Jacob Elmasry, Julia Wang, Angela Pan, Sebastian Tanase and Felix Zerbib. **Dominic Lorrimer**

"This type of process allows us to look at all different types of people from all different educational and social background, put them on an equal playing field and assess from there," Mr Huggins said.

PiP's overall recruitment process involves a group assessment centre and three rounds of interviews that each include a case study. The round one interview is with a manager or associate principal, the round two interview is with a partner and the round three interview is with a director (a senior partner equivalent rank) who makes the hiring decision.

This year's graduates at the firm include new starters from a range of backgrounds.

- Jessica Stuart, 23, has completed a bachelor of commerce and advanced studies in business information systems and marketing at the University of Sydney
- Jacob Elmasry, 23, has finished a bachelor of engineering (honours) and a bachelor of project management at the University of Sydney
- Julia Wang, 22, has a bachelor of commerce (finance, biochemistry and molecular biology) from the University of Western Australia
- Angela Pan, 22, has finished a bachelor of commerce (marketing, industrial relations and human resources) at the University of Sydney

- Sebastian Tanase, 27, has completed a bachelor of commerce (honours) and bachelor of laws at the University of Sydney
- Felix Zerbib, 24, has a bachelor of engineering (honours) and a bachelor of commerce (economics, honours) at the University of Sydney

Other graduates at the firm include **Jason Chiang**, 27, **Stef Ferguson**, 24, **Julia Georos**, 27, **Jonathon Huse**, 32, **Jodie Husman**, 22, **Jacky Lu**, 23, **Noah Pratt**, 22, and **Jack Wachsmann**, 31.

Explore more graduate programs

- What it takes to get a graduate role at PwC Australia
 [https://www.afr.com/companies/professional-services/what-it-takes-to-get-a-graduate-role-at-pwc-australia-20220327-p5a8ci]

 The firm will take on a record 817 graduates this year and intends to hire about 900 next year.
- Meet the new crop of elite graduates at McKinsey
 [https://www.afr.com/companies/professional-services/meet-the-new-crop-of-elite-graduates-atmckinsey-20220310-p5a3jo] McKinsey has hired almost 50 graduates as business analysts based across Sydney, Melbourne and Auckland.
- Strategy firm hires new crop of graduates [https://www.afr.com/companies/professionalservices/strategy-firm-hires-new-crop-of-graduates-20220307-p5a2hb] Kearney takes on its largest-ever local intake of graduates, welcoming 12 new hires to the consulting firm.

The companies paying graduates the most (and least)
 [https://www.afr.com/companies/professional-services/the-companies-paying-graduates-the-most-and-least-20220211-p59vt7]

 Strategy consulting firms pay top dollar, but industry and the private sector are competing for the most highly sought after graduates.

Retail case study

The client is an electrical appliance retailer with \$500 million in sales and about 90 stores across New Zealand. The chief executive has invited the firm in to discuss declining profitability.

A review of existing client data highlighted a decline in foot traffic and a decline in the number of items per basket.

Candidate question: What are the factors that could affect foot traffic and items per basket?

PiP implemented a new incentive and training program to drive an increase in the number of items in each basket and thereby lift sales.

Sales results before these changes:

- Average items per basket: 2
- Average cost per item: \$150
- Margin: 30 per cent

Sales results after four months:

- Average items per basket: 2.4
- Average cost per item: \$135
- Margin: 26 per cent

Candidate questions: Without using a calculator, can you tell whether the retailer was better off? What could be the causes of the result?

See below for suggested solution.

Cheese manufacturing case study

The client is a major player in the Australian dairy market. Individually wrapped cheese slices are one of the client's main products.

There has been an increase in demand for the product, and it cannot meet this demand with its current facilities. PiP has been brought in to identify ways to increase production volume at the company.

Candidates are expected to ask what is the current output and the expected output and to ask how the product is manufactured.

Candidate task: Build a value driver tree from the following information ...

Example slides from PiP's cheese manufacturing case study.

Example slides from PiP's cheese manufacturing case study.

Candidate questions: Using your value driver tree, what two drivers should be prioritised? Why did you choose these drivers?

See below for suggested solution.

Retail case study – suggested solution

Candidate question: What are the factors that could affect foot traffic and items per basket?

Foot traffic – advertising spend and effectiveness, promotion program effectiveness, price competitiveness

Items per basket – sales force skills, store layout/proximities, range of merchandise

Candidate questions: Without using a calculator, can you tell whether the retailer was better off? What could be the causes of the result?

No – sales increase from \$300 to \$324, but margin declines from \$90 to \$84.24. (Without use of calculator, candidate can either use paper to do calculations or use logic to get to that approximate number.

Cheese manufacturing case study – suggested solution

Edmund Tadros reports about the media and marketing sector. He previously led our coverage of the professional services sector. He is based in our Sydney newsroom. *Connect with Edmund on Twitter. Email Edmund at edmundtadros@afr.com.au*